

09/463,423

C 16. (TWICE AMENDED) The method as claimed in claim 10, wherein the oxygen supplied to the solution has a partial pressure of about 0.2 atmospheres.

18. (NEW) A method for oxidizing an inorganic species other than iron(II) in an aqueous solution comprising the steps of:

(i) supplying an oxidizable source of sulphur, and oxygen to the solution; and

(ii) irradiating the solution with UV light such that the species is oxidized.

19. (NEW) The method as claimed in claim 18, wherein the oxidizable source of sulphur is chosen from the group consisting of one or more of  $\text{SO}_3^{2-}$ ,  $\text{SO}_2(\text{g})$ , aqueous  $\text{SO}_2$ ,  $\text{HSO}_3^-$ ,  $\text{S}_2\text{O}_3^{2-}$  and  $\text{S}_4\text{O}_6^{2-}$ .

20. (NEW) The method as claimed in claim 18, wherein the inorganic species is present in the aqueous solution in trace quantities.

21. (NEW) The method as claimed in claim 18, wherein the inorganic species is chosen from the group consisting of one or more of arsenic manganese, cerium, selenium, cyanide, nickel, vanadium and uranium.

22. (NEW) The method as claimed in claim 18, wherein the wavelength of UV light is less than 300 nm.

23. (NEW) The method as claimed in claim 18, wherein the oxygen supplied to the solution is derived from air.

24. (NEW) The method as claimed in claim 18, wherein the oxygen supplied to the solution has a partial pressure of about 0.2 atmospheres.

25. (NEW) The method as claimed in claim 18, wherein the aqueous solution is one of: drinking water, industrial waste water, or an industrial process liquor.